

ABSTRACT OF THE DISCLOSURE

A catalyst, and a process for using the catalyst, that effectively converts and transalkylates indane and C₁₀ and heavier polycyclic aromatics into C₈ aromatics is herein disclosed. The catalyst comprises a solid-acid support such as mordenite plus a 5 metal component such as rhenium. The catalyst provides excellent conversion of such heavy aromatic species as naphthalene, which is also observed by a decrease in the ending-boiling-point of a hydrocarbon stream passed over the catalyst. The same catalyst is also effective for transalkylation of lighter aromatics, thus yielding a valuable xylenes product stream out of the process.